

Loops Practice 4! (Conditionals + Loops)

The practices here are meant to improve your coding skills. We won't be coding trading strategies. Instead, we will solve some math/logic problems.

Question 1

If we list all the natural numbers below 10 that are multiples of 3 or 5, we get 3, 5, 6 and 9.

Print out all the multiples of 3 or 5 below 100.

Question 2

Find the sum of all the multiples of 3 or 5 below 1000.

Question 3

Find the sum of all the multiples of 3 **and** 5 between 1000 and 1599.

Question 4

Each new term in the Fibonacci sequence is generated by adding the previous two terms. By starting with 1 and 2, the first 10 terms will be:

1, 2, 3, 5, 8, 13, 21, 34, 55, 89, ...

Find the sum of the terms in the Fibonacci sequence whose values do not exceed 10,000.

Question 5

Find the sum of the **even-valued** terms in the Fibonacci sequence whose values do not exceed 4,000,000.

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The answers are in this chapter's Dropbox folder. Look for the ipynb file titled "Loops Practice 4 - Conditional + Loops (ANSWERS)"